## CHAPTER 400 STORM SEWER PIPES AND OPEN CULVERT MATERIALS

## **SECTION 401 GENERAL**

401.01 Materials Storm sewer manholes and inlets that are or shall be maintained by the City or installed within City right-of-way, whether maintained by the City or not, shall be constructed of pre-cast reinforced concrete. Material and construction shall conform to the latest edition of the Indiana Department of Transportation (INDOT) "Standard Specifications", Sections 702 and 720.

Pipes and fittings that are or shall be maintained by the City or installed within City right-of-way, whether maintained by the City or not, shall be reinforced concrete conforming to ASTM C-443, or elliptical pipe conforming to ASTM C-507 with approved joints, or precast box culverts conforming to ASTM C-789 or C-850, whichever is applicable. Subsurface drain shall be Double Wall Hancor Hi-Q or equivalent. Other pipe and fittings not specified herein may be used only when specifically authorized by the City of Carmel. Pipe joints shall be flexible and watertight and shall conform to the requirements of Section 906, of the latest edition of the INDOT "Standard Specifications". If the storm sewer pipe is to be placed within a road right-of-way or in an area subject to loading, the pipe and fittings shall be Class III concrete. Piping with cover less than required in 501.01 or greater than 10-feet of cover shall be evaluated on a case by case condition and approved only with written permission by the City Engineer.